

23

For other home uses, the transaction entry device **12** may also initiate, via menu prompts, sequences for turning on and off various household devices including alarm systems, coffee makers, and the like. In this mode, the transaction entry device **12** may receive an RF or infrared signal indicating that a burglar or fire alarm has been activated and call up a form for calling the police or fire department, as appropriate. A call to the transaction entry device **12** may then be used to turn off the burglar or fire alarm by changing a field in a form which instructs the infrared transceiver **80** or RF transceiver **90** to send an appropriate control signal to the alarm device. This feature may also be prompted from a car phone via remote initiation of the form performing this function.

The transaction entry device **12** may also control all household telephone use as well as controlling the answering machine and keeping a telephone transaction log. The user may also pay household bills by completing an appropriate form and transmitting the form to a payee such as a credit card company, a bank, and the like. In short, the transaction entry device will permit the owner to connect to a remote database without owning a conventional computer system with an operating system and the like.

For personal applications, the transaction entry device **12** may be used to initiate a facsimile transmission, to provide telephone lists with automatic dialing upon selection, to provide expense accounts, personal scheduling, tax record keeping, and the like, and to provide direct access to travel information. For example, the database server **28** may be an airline reservations system. In this application, the data transaction assembler **18** dials the modem of the airline reservations system when the user requests data entry into an airline reservations form available at the user's transaction entry device **12**. The data transaction device **18** modems the database server **28**, and the operating system of the database server **28** selects interface programs for the airline reservations system. The interface programs call the database servers **38** of the airlines, retrieve the appropriate menu from database **40**, and modem the menu to the data transaction assembler **18**. The data transaction assembler **18** then displays the airline reservations menu on its display screen **20** for completion and transmission back to the airline reservations database server for processing. The swipe card may be used to provide credit card payment information and may be updated by permitting the data transaction assembler **18** to write to the swipe card. The user may also access frequent flyer club and mileage data, special offers on hotels, cruises and other travel, and the like.

In another home (or business) use, the transaction entry device **12** may be used to eliminate conventional phone mail greetings by enabling the caller's transaction entry device **12** to read in a set of visible menus from the called party's voice mail menu so that the calling party may select the desired options using a visible menu rather than a voiced menu. In other words, the caller would not have to wait through the litany of voiced phone mail options before making a selection and could make the desired selection right off of his or her own display. This would be accomplished by selecting a process from the menu of the transaction entry device **12** which will create a "visible" menu. When such a process is selected, the telephone electronics **14** or modem interface **78** makes a telephone connection to a remote phone mail system. Once the connection is made, the data transaction assembler **18** sends a data request for a visual representation of the phone mail menu of the remote phone mail system via the telephone connection to the remote phone mail system. A data stream containing the visual representation of the phone mail menu from the remote phone mail system is then returned via

24

the telephone connection and stored in form/menu memory **96** and presented to display screen **20** of the transaction entry device **12** for selection using the techniques described herein. When menu items are selected from the "visible" voice mail menu, the data transaction assembler **18** creates a data transaction indicating which menu item was selected and sends the data transaction to the remote phone mail system via the telephone connection. Based on the menu selection, the remote phone mail system then returns a data stream containing a visual representation of the next phone mail menu via the telephone connection for storage in form/menu memory **96** and display on display screen **20**. This process is repeated until the calling party is required to leave a message or the called party is reached. Such a system would be particularly helpful for interacting with voice mail systems, such as those at government offices, where numerous options are presented for selection.

Those skilled in the art will appreciate that the invention is unique by virtue of its ability to generalize applications to forms so that no code need to be written to implement a particular function. However, if code is needed or if multimedia data is to be part of a data transaction, it can be attached to a form which is stored as a parameter stream in a stream of data. Also, though the transaction entry device **12** has been described as a computer workstation, it can also be used in conjunction with an optional off-line storage device as a self-contained workstation and database unit independent of traditional operating systems. The transaction entry device **12** can also be used with an additional optional plug in as a network server or as a user interface in a network docking station.

Those skilled in the art will also appreciate that the foregoing has set forth the presently preferred embodiments of the invention but that numerous alternative embodiments are possible without departing from the novel teachings and advantages of the invention. Accordingly, all such modifications are intended to be included within the scope of the appended claims.

The invention claimed is:

1. A method, comprising:

obtaining data transaction information entered on a telephone from a single transmission from said telephone; forming a plurality of different exploded data transactions for the single transmission, said plurality of different exploded data transaction indicative of a single data transaction, each of said exploded data transactions having different data that is intended for a different destination that is included as part of the exploded data transactions, and each of said exploded data transactions formed based on said data transaction information from said single transmission, so that different data from the single data transmission is separated and sent to different destinations; and sending said different exploded data transactions over a channel to said different destinations, all based on said data transaction information entered in said single transmission.

2. A method as in claim 1, wherein said data transaction information is entered using a keyboard on the telephone.

3. A method as in claim 2, wherein said data transaction information is entered using scroll keys on the telephone to scroll between different options on a menu.

4. A method as in claim 2, wherein said data transaction information is entered using voice commands on the telephone.

5. A method as in claim 1, wherein said sending comprises sending over a modem.